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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,445	03/04/2004	Ping Chen	ALIP0041USA	2444
27765	7590	07/14/2006	EXAMINER	
NORTH AMERICA INTELLECTUAL PROPERTY CORPORATION			DUDEK JR, EDWARD J	
P.O. BOX 506			ART UNIT	
MERRIFIELD, VA 22116			PAPER NUMBER	

2192

DATE MAILED: 07/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/708,445	<b>Applicant(s)</b> CHEN, PING	
	<b>Examiner</b> Edward J. Dudek	<b>Art Unit</b> 2192	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Specification Objections***

The disclosure is objected to because of the following informalities:

In paragraph [0008], line 2, the word "of" is grammatically incorrect. In paragraph [0014], line 1; paragraph [0020], line 7; and paragraph [0020], line 10, the phrase "obtain the zone..." is technologically incorrect. Moreover, in paragraph [0008], line 3; and paragraph [0031], line 1, the phrase "calculates the zone..." is used in performing the same steps, which is inconsistent. In paragraph [0020], line 9, the word "of" is grammatically incorrect. In paragraph [0027], line 10, the phrase "zones of accessing" is grammatically incorrect. In paragraph [0027], line 22, the word "the" is grammatically incorrect. In paragraph [0027], line 25, the phrase "of accessing" is grammatically incorrect. In paragraph [0029], line 3, the word "accesses" is grammatically incorrect. In paragraph [0035], line 9, the phrase "capacity of a look up" is not understood.

Appropriate correction is required.

### ***Claim Objections***

Claim 1 is objected to because of the following informalities:

In line 8 the phrase "obtaining one of the zones..." is technologically incorrect. For purposes of applying prior art, it will be construed as "calculating the zone". In line 10 the word "of" is grammatically incorrect. For purposes of applying prior art, it will be construed as "received from".

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 3-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Han, U.S. Patent Application Publication #2002/0013879 A1. With respect to claim 1: A method of accessing a nonvolatile memory (see figure 2, element 11, and paragraph [0028]), the nonvolatile memory being installed in an electronic device (see figure 2, element 16, and paragraph [0022]) and comprising a plurality of zones (see paragraph [0028], lines 3-4), each zone comprising a plurality of spare blocks (see paragraph [0031], lines 4-8), the method comprising the following steps: storing the look up table of each zone in at least a spare block (see paragraph [0030], lines 5-9); the electronic device obtaining one of the zones of the nonvolatile memory corresponding to a logic address of a host for accessing the nonvolatile memory (see paragraph [0036], lines 1-3); the electronic device reading the look up table from the zone obtained in step (b) from at least one of the spare blocks and storing the look up table in a memory of the electronic device (see paragraph [0041], lines 8-11, also note that this buffer can be replaced with RAM see paragraph [0059]); and the host accessing the nonvolatile

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memory according to the look up table stored in the memory of the electronic device (see paragraph [0041], lines 15-18). With respect to claim 3: determining if the zone obtained in step (b) equals the zone corresponding to the look up table stored in the memory of the electronic device (see paragraph [0058]). The use of the pipeline operation described stores two look up tables in the device memory, the first table is the one being used for the current operation, and the second table has been fetched to be used for the second operation. Therefore the device would have previously determined that the look up table for the second operation is not in the memory and must be fetched from the block that the table is stored in. With respect to claim 4: in step (a) the look up table is stored in at least one of the spare blocks of the zone (see paragraph [0030], lines 5-9). With respect to claim 5: in step (a) the look up table of each zone is stored in at least one of the spare blocks of the plurality of zones (see paragraph [0030], lines 5-9). With respect to claim 6: the nonvolatile memory is a flash memory (see paragraph [0027] line 1). With respect to claim 7: a device for implementing the method of claim 1 (see figure 2, element 16 and paragraph [0022]).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Han, U.S. Patent Publication #2002/0013879 A1 in view of Iida et al, U.S. Patent Publication #2002/0124130 A1. The Han reference teaches all the limitations of claim 1 as discussed above. However, the reference does not teach determining if the look up table of each zone is stored in the nonvolatile memory. Iida teaches marking one of the bits in a block if the information that is used in that block is for a logical address to physical address look up table (see paragraph [0132], lines 4-6). The block is marked to keep track of where in the memory the look up table is, because the nature of flash memory demands that updated data be written to a different block than the original data (see paragraph [0133], lines 6-10). Marking a bit in the block that is storing the table provides the advantage of being able to determine if a look up table exists in the block, and also allows the device accessing the memory to find the look up table. It would have been obvious to a person having ordinary skill in the art to which said subject matter pertains to have modified the Han reference by including management flags and then marking the block that contains the look up table, as taught by Iida, to provide the advantage of determining if the look up table of each zone is stored in the nonvolatile memory.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward J. Dudek whose telephone number is 571-270-

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1030. The examiner can normally be reached on Mon thru Thur 7:30-5:00pm Sec. Fri 7:30-4 pm EST.

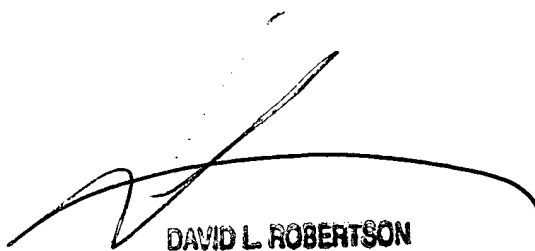
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Robertson can be reached on 571-272-4186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Edward J. Dudek

May 9, 2006



DAVID L. ROBERTSON  
PRIMARY EXAMINER